PROJECT TITLE

: ANALYTICAL INVESTIGATIONS

PERIOD COVERED

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## SACCHARIN

Several tipping papers and one reference tipping paper sample were analyzed for saccharin. The qualitative and quantitative analyses were performed by HPLC. The method involved acid  $(0.05N \, H_2SO_4)$  and diethyl ether extraction and determination on a  $C8^4$  column (15 cm) with water, acetic acid, methanol (59/1/40) eluent.

All results were confirmed by  $GC^2/MS$  after derivatization of saccharin to N-methyl saccharin (2) by M<sup>T</sup> (197) and fragmentation. Results have been submitted to QC PME (3) (4):

At the request of QC PME a rather simple spot test for the presence of sodium saccharin on TP is being sought. The precipitation reaction between a dilute acidic silver nitrate solution and sodium saccharin seems promising. Work is continuing concerning the sensitivity and the selectivity of the method.

## REFERENCES

- 1. Verbal request from F. Lopes to W. Fink, February 5, 1981.
- 2. R.J. Daun, J.A.O.A.C 54, 1140 1145 (1971).
- 3. Memos from E. Lecoultre to W. Fink, February 19 and 23, 1981.
- 4. Memo from W. Fink to F. Lopes, February 20, 1981.

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